-continued

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Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys
305                 310                 315                 320

Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu
                325                 330                 335

Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr
            340                 345                 350

Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu
        355                 360                 365

Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp
    370                 375                 380

Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val
385                 390                 395                 400

Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp
                405                 410                 415

Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His
            420                 425                 430

Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro
        435                 440                 445

Gly
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What is claimed is:

**1**. A method for purifying a polypeptide from a composition comprising the polypeptide and contaminants, which method comprises the sequential steps of:

(a) loading the composition onto an ion exchange resin with an equilibration buffer having a first salt concentration;

(b) washing the ion exchange resin with a wash buffer until a predetermined protein concentration is measured in the flowthrough, wherein the salt concentration of the wash buffer increases from an initial, second salt concentration that is greater than the salt concentration of the equilibration buffer, to a final, third salt concentration;

(c) passing a fixed volume of wash buffer at the final, third salt concentration over the cation exchange resin; and

(d) eluting the polypeptide from the ion exchange resin with elution buffer that has a salt concentration that is greater than the final salt concentration of the wash buffer.

**2**. The method of claim **1** wherein the ion exchange resin is an anion exchange resin.

**3**. The method of claim **1** wherein the ion exchange resin is a cation exchange resin.

**4**. The method of claim **3** wherein the cation exchange resin comprises sulphopropyl immobilized on agarose.

**5**. The method of claim **1** wherein the elution buffer has a higher conductivity than the equilibration buffer.

**6**. The method of claim **1** wherein the elution buffer comprises about 145 mM Na/HOAc and the equilibration buffer comprises about 70 mM Na/HOAc.

**7**. The method of claim **1** wherein the elution buffer comprises about 100 mM NaCl and the equilibration buffer comprises about 45 mM NaCl.

**8**. The method of claim **1** wherein the wash buffer comprises a mixture of equilibration buffer and elution buffer.

**9**. The method of claim **8** wherein the increase in the salt concentration of the wash buffer during step (b) is achieved by increasing the proportion of elution buffer in the wash buffer.

**10**. The method of claim **9** wherein the proportion of elution buffer in the wash buffer increases at a constant rate.

**11**. The method of claim **10** wherein the increase in the proportion of elution buffer causes the salt concentration of the wash buffer to increase at a constant rate of from about 1 mM to about 3 mM per column volume of wash buffer.

**12**. The method of claim **9** wherein the percentage of elution buffer in the wash buffer increases at two or more different rates during the course of washing in step (b).

**13**. The method of claim **12** wherein the percentage of elution buffer in the wash buffer increases at a first rate for a first segment of the washing, at a second rate for a second segment of the washing and at a third rate for a third segment of the washing.

**14**. The method of claim **1** wherein the polypeptide is an antibody.

**15**. The method of claim **14** wherein the antibody binds HER2.

**16**. The method of claim **14** wherein the contaminant is a deamidated variant of the antibody.

**17**. The method of claim **14** wherein the amount of antibody in the composition loaded onto the ion exchange resin is from about 15 mg to about 45 mg per mL of cation exchange resin.

**18**. The method of claim **1** wherein the predetermined protein concentration in step (b) corresponds to an OD of 0.6 measured at 280 nm.

**19**. The method of claim **1** wherein from about 0.4 to about 1 column volumes of wash buffer are passed over the ion exchange resin in step (c).

**20**. The method of claim **1** wherein the pH of the equilibration buffer, wash buffer and elution buffer is approximately the same.

**21**. The method of claim **1** wherein the pH of the equilibration buffer, wash buffer and elution buffer is approximately 5.5.

**22**. The method of claim **1** further comprising subjecting the composition comprising the polypeptide to one or more further purification steps either before, during, or after steps